

which the drawing was made may be, it certainly is not a lactometer, and cannot be used as such. It appears to be a portion of a complicated piece of chemical apparatus, whereas a lactometer is exceedingly simple in construction.

As a whole, while the book may not cause the unskilful to laugh, these not being able to note its grotesqueness, it certainly is calculated to make the judicious grieve.

C. H.

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ATLAS AND PRINCIPLES OF BACTERIOLOGY. By PROFESSOR DR. K. H. LEHMANN and R. O. NEUMANN, Drs. of Philosophy and Medicine. Edited by GEORGE H. WEAVER, M.D. In two Parts. Philadelphia and London: W. B. Saunders & Co., 1901.

LEHMANN and NEUMANN's work is now well known and its value established. It is an excellent work; with certain limitations it covers the field satisfactorily, and the illustrations in the Atlas leave little to be desired. We believe that accurate drawings for the purpose of studying bacteria are more valuable than photographs. This is particularly true in the representation of cultures, a fact to which Lehmann calls especial attention in his preface. There is some question whether the plan adopted here of representing all cultures upon a black background is entirely satisfactory. The greatest virtue of any drawing is the accurate representation of nature, and any form of diagram is a poor substitute unless the actual picture is so complex that its essential details cannot be appreciated by the uneducated eye. It is possible that the mechanical difficulties in the reproduction of the cloudy amber-color of the agar culture media, or the transparency of the gelatin culture media was so great that the present method was on the whole better. As far as it goes it is exceedingly satisfactory, and perhaps, for purposes of diagnosis, it is all that could be demanded. Practically all the important organisms are represented, and in such a variety of forms and cultures that any other Atlas would rarely be needed in the ordinary hospital laboratory.

The most interesting part of such a work is of course the general section; the most useful, the special section. Lehmann's article on the general aspects of bacteriology is one of the most satisfactory that we have ever read. It is thorough, approximates completion sufficiently; it is clear, and devotes itself rather to facts than to theories. The discussion of immunity is perhaps somewhat briefer and less thorough than the other parts of the book. The subject of agglutination receives such scant consideration that it might well have been omitted. Widal, who has certainly done more to promote the utility of this reaction in typhoid fever than any other man, is barely mentioned, and then only in connection with one of his subsidiary suggestions. In the article upon the typhoid bacillus the statements on this subject, in view of its extreme importance, are even less adequate than in the general section. In the discussion of the classification Lehmann is at his best. He places it upon a clear scientific basis, recognizes the difficulties, suggests methods for overcoming them, and, as far as possible, urges the great importance of a thorough study of the individual species of bacteria.

While not advocating names etymologically incorrect, he does not believe in changing those already suggested, because, after all, the important thing is to designate the genera and species and not to avoid hybrids of Greek and Latin. The classification which he adopts is based upon rational principles, and, as a matter of fact, is one of the most satisfactory at present in use. The subdivision of the family bacteriaceæ into the bacterium without endogenous spores and bacillus with endogenous spores will be difficult to carry against the habit of the world of calling all rod-shaped organisms bacilli. We agree with Lehmann that any practical division into the pathogenic and non-pathogenic bacteria is absurd. There is no scientific distinction between the pathogenic and non-pathogenic excepting in regard to their action upon certain living organisms, and it is not impossible that there are few species that are not pathogenic for some form of life. On the other hand, there is accumulating evidence that the so-called pathogenic and non-pathogenic bacteria may pass one into the other. The descriptions of the individual species are concise, clear, and thorough; the translation is fair. There is a distinct flavor of the original German, such as complicated adjectival phrases and a persistent use of the inverted sentence. We think that in another edition the book might be improved in this respect, and yet it must be admitted that the language is quite comprehensible, although we doubt whether it would be so to a reader not familiar with the German language.

J. S.

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CARE AND TREATMENT OF EPILEPTICS. By WILLIAM PRYOR LETCHWORTH, LL.D. New York and London: G. P. Putnam's Sons, 1900.

THIS work is not medical in the narrow sense of the word. It does not tell what physic to give epileptics. It is a careful study of the question of what the State and charitable persons owe to the epileptic as an unfortunate who, not being able to care for himself, must be guarded and cared for. It is a very careful study of a serious social problem. The author gives an account of what measures have been taken in the several States and in foreign countries to aid epileptics by institutional treatment. It is to the discredit of America that the problem has been more successfully treated in several European countries than by us. Indeed, the first attempts began abroad, and have only been slowly followed here. No class appeals more worthily for aid, and yet, as compared with the insane and feeble-minded, they have been sadly neglected. Every State should have an institution in the country—a large farm, not a mere house of detention—where patients could live a hygienic life, work out-of-doors, and have rational and healthy amusements. Apart from the moral duty we owe to unfortunates as a business question, it probably would be cheaper to properly care for epileptics than to neglect them. Prisons and houses of correction, institutions which cost money to support, contain not a few epileptics who pass in and out repeatedly, or, finally, get themselves hanged, which also costs money. It might be cheaper to prevent crime by proper care. How much has been done and how much more remains to be done this excellent book well shows.

C. W. B.